

Claims

1. A process for reducing the amount of sulfur-containing impurities in carbonaceous materials, comprising

(a) contacting said materials with an aqueous solution of hydrofluorosilicic acid in the absence of hydrogen fluoride and a strong mineral acid under conditions wherein at least some of said sulfur-containing impurities react with said hydrofluorosilicic acid to form reaction products, and

(b) separating said reaction products from said carbonaceous materials.

2. A process for reducing the amount of sulfur-containing impurities in carbonaceous materials, comprising

(a) contacting said materials with an aqueous solution of hydrofluorosilicic acid in the absence of hydrogen fluoride under conditions wherein at least some of said sulfur-containing impurities react with said hydrofluorosilicic acid to form reaction products;

(b) separating said reaction products and said hydrofluorosilicic acid from said carbonaceous materials and subsequently

(c) treating said carbonaceous materials with a fluorine acid solution which comprises an aqueous solution of hydrofluorosilicic acid and hydrogen fluoride.

3. A process for reducing the amount of sulfur-containing impurities in carbonaceous materials, comprising:

treating said carbonaceous materials with a fluorine acid solution which comprises an aqueous solution of hydrofluorosilicic acid and hydrogen fluoride,

separating said carbonaceous materials from said aqueous solution of hydrofluorosilicic acid and hydrogen fluoride, and then

contacting said carbonaceous materials with an organic solvent capable of dissolving elemental sulfur.

4. The process of claim 1 or 2 wherein the concentration of hydrofluorosilicic acid in the step (a) is in the range of 27% to 37% (w/v or w/w or v/w).

5. The process of claim 1 or 2 wherein the concentration of hydrofluorosilicic acid in the step (a) is in the range of 28% to 36% (w/v or w/w or v/w).